## Iowa Department of Natural Resources Natural Resource Commission

TOPIC Diagnostic and Feasibility Study of Lake Manawa, Pottawattamie County

The Commission is requested to approve an agreement with a provider, to be named after the 04/08/08 bid selection process and provided to the Commission prior to the 04/10/08 NRC meeting, to provide a diagnostic feasibility study of Lake Manawa, Pottawattamie County, as part of the Department of Natural Resources' Lake Restoration activities. The parties will enter into a one-year contract in an amount not to exceed \$225,000 to analyze and make technical recommendations for restoration and potential dredging activities at Lake Manawa to meet water quality goals. Specific objectives of the Project include:

- 1. Determine the feasibility of conducting dredging activities at Lake Manawa.
- 2. Identify any risks and remedial actions that should be taken with respect to the dredging activities at Lake Manawa.
- 3. If dredging is feasible, identify locations and method of in-lake dredging to obtain sand that meets DOT standards for highway building material.
- 4. Evaluate how a change(s) to the lake bottom, as the result of dredging, will influence the inflow and out-flow (mass balance) of water in Lake Manawa.
- 5. Evaluate in-flow and out-flow interactions between Lake Manawa and Indian and Mosquito Creeks. Make recommendations on future water budgets for maintaining the desired lake water level.
- 6. Provide the DNR with a diagnostic and feasibility study of Lake Manawa for planning a lake restoration program on the lake and its watershed.
- 7. Provide an analysis and description of the current watershed and storm water movement, characteristics, and recommended improvements that could be made that would be beneficial to the water quality of the lake and environmental quality of the watershed.
- 8. Provide alternatives to proposed lake restoration activities contemplated in the existing studies and this RFP to meet water quality and recreational goals

In addition to the Department's dedicated Lake Restoration funds, the Department shall utilize local contributions, which may constitute up to 25% of the study's cost. The Department utilized a competitive process to select the Contractor.

Ken Herring, Administrator Conservation and Recreation Division April 10, 2008